

AMENDMENTS TO THE CLAIMS

1-37. (Cancelled)

38. (Currently Amended) A method for adapting to resource constraints of a digital home communication terminal (DHCT), said method comprising steps of:

providing a digital home communication terminal (DHCT), wherein said DHCT is configured to operate in a non-resource constrained mode and a plurality of resource constrained modes;

determining whether one of the resource-constrained modes or the non-resource constrained mode is to be initiated;

responsive to determining that one of the resource-constrained modes is to be initiated, ~~initiating operating the DHCT in the determined resource-constrained mode in the DHCT,~~ including:

retrieving a set of reconstructed decompressed video data frames from a first portion of a memory component, wherein the memory component stores compressed video data frames in a distinct second portion, wherein the set of video data frames corresponds to a video picture; and

transferring the set of retrieved reconstructed decompressed video data frames to a display device while downscaling the video picture in transit to the display device.

39. (Cancelled)

40-50. (Cancelled)

51-52. (Cancelled)

53. (Currently Amended) A method for adapting to resource constraints of a digital communication terminal (DHCT), said method comprising steps of:

providing a digital home communication terminal (DHCT), wherein said DHCT is configured to operate in a non-resource constrained mode and a plurality of resource-constrained modes;

determining whether one of the resource-constrained modes is to be initiated; responsive to determining that one of the resource-constrained modes is to be initiated, initiating the resource-constrained mode, including:

retrieving, from a first portion of a memory component, a set of compressed pictures frames;

storing, in a second and distinct portion of the memory component, a set of decoded pictures frames corresponding to the set of compressed pictures frames, each of the set of decoded pictures frames being at a first spatial resolution;

retrieving, from the second and distinct portion of the memory component, the set of decoded pictures frames; and

transferring the retrieved set of decoded pictures frames to a display device while scaling the pictures frames in transit to the display device to a second spatial resolution without storing the pictures frames in the memory component, wherein the second spatial resolution is smaller than the first spatial resolution.

54. (Currently Amended) A digital home communication terminal (DHCT) comprising :

logic configured to operate the DHCT in a non-resource constrained mode and a plurality of resource-constrained modes;

logic configured to determine whether one of the resource-constrained modes is to be initiated;

logic configured to, responsive to determining that the resource-constrained modes is to be initiated, initiate the resource-constrained mode, including:

logic configured to retrieve, from a first portion of a memory component, a set of compressed pictures frames;

logic configured to store, in a second and distinct portion of the memory component, a set of decoded pictures frames corresponding to the set of compressed pictures frames, each of the set of decoded pictures frames being at a first spatial resolution;

logic configured to retrieve, from the memory component, the set of decoded pictures frames; and

logic configured to transfer the set of decoded pictures frames to a display device while scaling the pictures frames in transit to the display device to a second spatial resolution without storing the pictures frames in the memory component, wherein the second spatial resolution is smaller than the first spatial resolution.

55. (Currently Amended) A method for adapting to resource constraints of a digital home communication terminal (DHCT), said method comprising steps of:

providing a digital home communication terminal (DHCT), wherein DHCT is configured to operate in a non-resource constrained mode and a plurality of resource-constrained modes;

receiving, in a memory component, video data frames comprising a complete picture;

determining whether one of the resource-constrained modes is to be initiated;

responsive to determining that one of the resource-constrained modes is to be initiated, initiating the resource-constrained mode, including:

retrieving the video data frames from the memory component; and

transferring the retrieved video data frames to a display device while downscaling the video picture in transit to the display device.

56-60. (Cancelled)

61-64. (Cancelled)

65. (Cancelled)

66. (Currently Amended) A computer readable medium containing a program for use in a digital home communication terminal (DHCT) to adapt to resource constraints, the program comprising logic for performing the steps of:

providing a digital home communication terminal (DHCT), wherein DHCT is configured to operate in a non-resource constrained mode and a plurality of resource-constrained modes; receiving, in a memory component, video data frames comprising a complete picture; determining whether one of the resource-constrained modes is to be initiated; responsive to determining that one of the resource-constrained modes is to be initiated, initiating the resource-constrained mode, including:

retrieving the video data frames from the memory component; and

transferring the retrieved video data frames to a display device while downscaling the ~~video~~ picture in transit to the display device.

67. (Currently Amended) The computer readable medium of claim 66, the program further comprising logic for performing the step of:

transmitting graphics data to the display device, wherein the graphics data is displayed contemporaneously with the scaled video data frames.

68. (Previously Presented) The computer readable medium of claim 66, wherein the downscaling comprises horizontal scaling.

69. (Previously Presented) The computer readable medium of claim 66, wherein the downscaling comprises vertical scaling.

70. (Currently Amended) The computer readable medium of claim 66, wherein the downscaled video picture is not stored in the memory component.

71. (Currently Amended) The method of claim 38, further comprising:  
transmitting graphics data to the display device, wherein the graphics data is displayed contemporaneously with the downscaled video-data picture.

72. (Previously Presented) The method of claim 38, wherein the downscaling comprises horizontal scaling.

73. (Previously Presented) The method of claim 38, wherein the downscaling comprises vertical scaling.

74. (Currently Amended) The method of claim 53, further comprising the step of:  
transmitting graphics data to the display device, wherein the graphics data is displayed contemporaneously with the scaled video data frames.

75. (Previously Presented) The method of claim 53, wherein the scaling comprises downscaling.

76. (Previously Presented) The method of claim 53, wherein the scaling comprises horizontal scaling.

77. (Previously Presented) The method of claim 53, wherein the scaling comprises vertical scaling.

78. (Currently Amended) The DHCT of claim 54, wherein the system is further configured to:

transmit graphics data to the display device, wherein the graphics data is displayed contemporaneously with the scaled pictures frames.

79. (Cancelled)

80. (Previously Presented) The DHCT of claim 54, wherein the scaling comprises horizontal downscaling.

81. (Previously Presented) The DHCT of claim 54, wherein the scaling comprises vertical downscaling.

82. (Currently Amended) The method of claim 55, further comprising the step of: transmitting graphics data to the display device, wherein the graphics data is displayed contemporaneously with the scaled video data frames.

83-84. (Cancelled)

85. (Currently Amended) The method of claim [[28]] 38, wherein the plurality of resource-constrained modes include a memory-constrained mode, a bus bandwidth constrained mode, and a memory and bus-bandwidth constrained mode.

86. (Previously Presented) The method of claim 53, wherein the plurality of resource-constrained modes include a memory-constrained mode, a bus bandwidth constrained mode, and a memory and bus-bandwidth constrained mode.

87. (Previously Presented) The DHCT of claim 54, wherein the plurality of resource-constrained modes include a memory-constrained mode, a bus bandwidth constrained mode, and a memory and bus-bandwidth constrained mode.

88. (Previously Presented) The method of claim 55, wherein the plurality of resource-constrained modes include a memory-constrained mode, a bus bandwidth constrained mode, and a memory and bus-bandwidth constrained mode.